Docket No.: LU05013USU Amendment dated May 2, 2008

IN THE DRAWINGS:

Please substitute the enclosed formal drawing sheet 5/21 marked "Replacement Sheet" for the previously-filed drawing sheet 5/21. The detailed description states at page 15 that alkyl groups may be located at the 2-positions of the rings analogous to alkyl groups A, B which may be located at 7-positions of the rings. The specification has been accordingly amended to refer to the reference labels "C" and "D" now added to FIG. 5 by stating that A, B, C and D each independently can be hydrogen or –alkyl. FIG. 6 has been amended to correct an obvious typographical error. The carbonyl (C=O) group directly below R₁ has been horizontally flipped so that the carbon atom is bonded with R₁ and the carbonyl oxygen atom extends to the right.

Docket No.: LU05013USU Amendment dated May 2, 2008

REMARKS

STATUS SUMMARY

Claims 9, 26, 35 and 42 have been amended. Claims 1-8, 10-13, 15-25, 27-30, 32-34, 36-41 and 43-45 have been cancelled. New dependent claims 46 and 47 have been added. These new claims are supported, for example, by the specification at page 19, lines 3-18. Claims 9, 14, 26, 31, 35, 42, 46 and 47 are presently pending. Claims 9, 14, 26, 31, 35 and 42 were objected to as depending from rejected claims, and were indicated as being allowable if rewritten in independent form. Claims 2 and 8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 2, 4, 6-8, 12-13, 15-18, 20, 22-25, 29-30, 32-34, 38-40, 41 and 45 were rejected under 35 U.S.C. § 102(b) as anticipated by Taylor-Smith et al., "Erbium-Doped Polysilsesquioxane Molecular Composite Systems", American Chemical Society Division of Polymeric Materials: Science and Engineering, August 20-24, 2000, pp. 237-8 ("Taylor-Smith"). Claims 3, 10, 19, 27, 36 and 43 were rejected under 35 U.S.C. § 103(a) as obvious over Taylor-Smith in view of Fan et al., "Luminescent Behavior of the europium (III) complexes with hexafluoroacetylacetonate in the ORMOSIL matrices", Material Science and Engineering, Vol. B100 (2003), pp. 147-151 ("Fan"). Claims 5 and 21 were rejected under 35 U.S.C. § 103(a) as obvious over Taylor-Smith in view of Choi et al., "Amorphous Polysilsesquioxanes as a Confinement Matrix for Quantum-Sized Particle Growth. Analysis and Quantum Size Effect of CdS Particles Grown in Porous Polysilsesquioxanes", J. Phys. Chem., Vol. 98, (1994), pp. 3207-3214. Claims 11, 28, 37 and 44 were rejected under 35

Amendment dated May 2, 2008

U.S.C. § 103(a) as obvious over Taylor-Smith in view of Kolodner et al., U.S. Patent No.

5,971,610 entitled "Fluorescent Thermal Imaging Using Rare-Earth Chelate Films" (Kolodner).

THE INDICATION OF ALLOWABILITY OF CLAIMS 9, 14, 26, 31, 35 AND 42

Applicants acknowledge with appreciation the indication that claims 9, 14, 26, 31, 35 and

42 would be allowable if rewritten in independent form. Claims 9, 26, 35 and 42 are rewritten in

independent form by the above amendments. Each of claims 9 and 26 has been further amended

consistent with the statement at page 15 of the specification indicating that alkyl groups may be

located at the 2-positions of the rings analogous to alkyl groups A, B which may be located at 7-

positions of the rings. Claims 14 and 31 depend from claims 9 and 26, respectively. All of the

other claims have been cancelled.

THE REJECTION OF CLAIMS 2 AND 8

Claims 2 and 8 stand rejected under 35 U.S.C. § 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. This rejection is moot, as claims 2 and 8 have been cancelled.

THE REJECTION OF CLAIMS 1, 2, 4, 6-8, 12-13,

15-18, 20, 22-25, 29-30, 32-34, 38-40, 41 and 45

Claims 1, 2, 4, 6-8, 12-13, 15-18, 20, 22-25, 29-30, 32-34, 38-40, 41 and 45 stand

rejected under 35 U.S.C. § 102(b) as anticipated by Taylor-Smith. This rejection is moot, as

claims 1, 2, 4, 6-8, 12-13, 15-18, 20, 22-25, 29-30, 32-34, 38-40, 41 and 45 have been cancelled.

-9-

THE REJECTION OF CLAIMS 3, 10, 19, 27, 36 and 43

Claims 3, 10, 19, 27, 36 and 43 stand rejected under 35 U.S.C. § 103(a) as obvious over Taylor-Smith in view of Fan. This rejection is moot, as claims 3, 10, 19, 27, 36 and 43 have been cancelled.

THE REJECTION OF CLAIMS 5 AND 21

Claims 5 and 21 stand rejected under 35 U.S.C. § 103(a) as obvious over Taylor-Smith in view of Choi. This rejection is moot, as claims 5 and 21 have been cancelled.

THE REJECTION OF CLAIMS 11, 28, 37 and 44

Claims 11, 28, 37 and 44 stand rejected under 35 U.S.C. § 103(a) as obvious over Taylor-Smith in view of Kolodner. This rejection is moot, as claims 11, 28, 37 and 44 have been cancelled.

Docket No.: LU05013USU Amendment dated May 2, 2008

CONCLUSION

Since all of the pending claims as amended are not anticipated by and are unobvious over the cited references, Applicants believe that this application is now in order for allowance. The Examiner is respectfully requested and invited to contact the undersigned by telephone in order to resolve any remaining issues.

Respectfully submitted,

THE LAW OFFICE OF JAY M. BROWN

Date: May 2, 2008

By:

Jay M. Brown

Registration No. 30,033

The Law Office of Jay M. Brown 6409 Fayetteville Road, Ste. 120-306

Durham, North Carolina 27713

Phone: (919) 522-0312 Fax: (919) 267-5685

Customer No. 51029